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## CHAPTER 5. TECHNICAL PROCESSING

### SECTION 1, ARCHITECTURAL

5-1GENERAL. Architectural analysis is to determine the acceptability of the improvements essential to effective mortgage underwriting. Detailed instructions are in Handbook 4460.1 REV-2, Architectural Analysis and Inspections for Project Mortgage Insurance.

5-2PROJECT ACCEPTABILITY. The project must be financially feasible and appropriate for the moderate income housing market and the proposed resident profile. The project must also comply with the HUD approved project design program upon which the appraiser based rents, expenses and project value.

5-3DESIGN. Housing for moderate income families must provide a continuing market appeal. Amenities, space and aesthetics must be competitive with other properties catering to the same market segment. The project must be visually pleasing, well suited to the needs of the occupants, and of good design reflecting the architectural standards of the neighborhood and of the community in which it is situated. Site, building and dwelling unit designs must be practical and use space effectively.

A.COST CONCERNS. The design should incorporate proven construction cost-saving techniques, durable cost-effective materials suitable for the intended use, energy saving features, and cost-efficient mechanical systems. Minimizing initial construction costs and continuing operating and maintenance costs are essential to reducing mortgage risk.

B.ACCESSIBILITY. The design must consider occupancy and use of the project by the mobility impaired, elderly and children. Designs that meet these special needs benefit all residents and can be economically achieved, when considered from initial concept design studies.

C.CRIME PREVENTION. The concepts of defensible space and security by casual observation must be reflected in site and building designs to minimize the potential of physical acts of crime against project residents and

D.RECREATIONAL FACILITIES. Suitable on-site recreational facilities are necessary, except where otherwise reasonably available to project residents. Recreational facilities for children should be located where security by casual observation can be provided by adults engaged in their normal routines. Tot-lots should have permanent seating arranged for the convenience of supervising adults.

5-4STANDARDS. Project improvements must comply with applicable Federal, State and local laws, regulations, ordinances, codes and other workings of the law. HUD design standards are reflected in the Minimum Property Standards, MPS 4910.1, by direct requirement and referenced standards. Project designs and work must also satisfy imposed environmental requirements, lead-based paint hazard elimination, site conditions, and provisions of special testing and engineering analysis. Handbook 4460.1 REV-2 provides detailed information.

5-5FIRM APPLICATION. Drawings and specifications submitted with the firm application must satisfy the requirements for paragraphs 5-2 through 5-4 and be in the form and detail required by Handbook 4460.1 REV-2.

5-6REQUIRED ARCHITECT SERVICES. The services of a professional, licensed to provide the required services in the State where the project is located, are required, except in limited circumstances, for both project design and contract administration.

A.An Owner-Architect Agreement (AIA Document B-181) and HUD Amendment, are required for each prime architect.

B.The selected architect(s) must conform to the HUD selection criteria in Handbook 4460.1 REV-2.

C.The architect administering the construction contract may not have an identity-of-interest with the owner or contractors.

5-7 DESIGN REPRESENTATIVE.

A.CLIENT SERVICES. The design representative must provide the sponsor's design consultants guidance in meeting

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program and project design requirements. Assistance must be timely, and suggested/required design features supported by impartial reason. The HUD design representative must work with the sponsor and its design consultants from the preapplication meeting through firm application to best help achieve program objectives.

B.FIELD OFFICE SERVICES. The design representative must monitor the progress of construction document development, advise the DHD of unsatisfactory progress and recommend an appropriate HUD response. The design representative must also identify when drawings and specifications are acceptable for receipt of the Conditional and/or Firm application.

5-8SUBSTANTIAL REHABILITATION. Following is a summary of application processing for substantial rehabilitation projects. Handbook 4460.1 REV-2 provides complete details.

A.JOINT INSPECTION. An on-site inspection will occur as soon as possible with HUD's architectural, cost and valuation staff and the sponsor's architect and business representative to determine the project's condition and eligibility.

B.ENGINEERING REPORTS. Engineering and/or other technical reports may be required of the sponsor to evaluate project feasibility. These may include analysis of/for mechanical and structural systems, lead-based paint hazard, termite hazard, etc.

C.WORK WRITE-UP. The sponsor's architect must prepare a work write-up, drawings and specifications to define the extent of rehabilitation work.

D.CONTRACT DOCUMENTS. The exact requirements for specific contract documents will be made by the Design Representative after the joint inspection.

5-9INSPECTION. The HUD field representative must keep the Chief Architect/DHD advised by filed reports of any condition, event or other occurrence that constitute a potential project mortgage risk, including lack of satisfactory progress and reported instances of nonpayment of entities for which mortgage proceeds have been disbursed. The HUD field representative must also certify to the reasonableness of payment for completed work and stored

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materials, and to acceptable completion of work for occupancy and contract completion. Handbook 4460.1 REV-2 provides complete details.

## SECTION 2 - CONSTRUCTION COST PROCESSING

5-10COST OVERVIEW. Cost estimation is done at the following stages of project processing: Conditional and Firm Commitment, and construction changes. Detailed instructions for cost estimation are in HUD Handbook 4450.1 REV-1. The cost estimate is used to arrive at a Total for All Improvements, which is entered on line 50 of Section G of Form HUD-92264. The Total for All Improvements consists of Structure and

Land Improvement costs, General Requirements, and fees directly related to the construction of the project.

A. At Conditional and Firm stages, a Replacement Cost Estimate (Commissioner's Estimate) is made to arrive at the Total for All Improvements.

B. In addition to the Replacement Cost Estimate, supplemental cost estimates are made to assist Valuation in determining the Total Estimated Replacement Cost. These supplemental cost estimates consist of Unusual Land Improvements, Demolition, Cost Not Attributable to Dwelling Use, and Offsite costs.

C. During Firm Commitment processing, the cost analyst examines the Contractor's and/or Mortgagor's Cost Breakdown, Form HUD-92328, comparing it to the Commissioner's Estimate and resolving any significant differences between the two estimates.

D. The cost analyst completes Firm Commitment processing by preparing a temporary Property Insurance Schedule, Form HUD-92329.

E. Should changes be made to the construction contract during the construction stage (Change Orders), cost estimates are made for these changes. The cumulative cost change may effect the final mortgage amount.

F. At the close of construction, the cost analyst performs a review of the general contractor's Cost Certification. Detailed instructions for this are found in HUD Handbooks 4450.1 REV-1 and 4470.2 REV-1.

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G. Finally, the cost analyst prepares a permanent Property Insurance Schedule, Form HUD-92329.

5-11 BUILDER'S AND SPONSOR'S PROFIT AND RISK ALLOWANCE (BSPRA). BSPRA is used in-lieu-of Builder's Profit on Form HUD-92326 and line 44 of Section G of Form HUD-92264 where an identity-of-interest exists between the General Contractor (Builder) and the Sponsor.

A. When BSPRA is used, the Builder's Profit has a value of zero for the purpose of calculating the Total for All Improvements.

B. For data purposes, estimate a normal builder's profit and use this amount to establish a working subtotal consisting of Total Structures, Land Improvements, General Requirements, General Overhead and Builder's Profit. Architects' Fees, Other Fees and Bond Premium are each divided into this subtotal and the

quotients, expressed as percentages, are entered into the Field Office data bank. Do not include the estimate for normal builder's profit in the Total for All Improvements when BSPRA is used.

### SECTION 3 - VALUATION PROCESSING

#### 5-12 GENERAL.

A.Purpose of Valuation Processing. Valuation evaluates the property as security for a long-term insured mortgage.

B.Primary Distinction; Finding of "acceptable risk" in-lieu-of "value":

1.Eligible projects must represent a degree of mortgage risk acceptable to the Commissioner.

2.Estimates of "value" by the capitalization and market comparison approaches are not required. The estimate of project replacement cost substitutes for value when applying certain criteria which limit the mortgage.

3.There must be a reasonable expectation that project income will be adequate for the duration of the mortgage term to maintain the property, pay all required project expenses, and meet the debt service requirements.

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4.Under Section 221(d), HUD insures multifamily housing for moderate income households. Whether applications are brought under 221(d)(3) or (4), this means that certain income restrictions may apply through the use of tax exempt financing, Low Income Housing Tax Credits or other assistance as are more fully explained in the references listed below.

#### 5-13 PRINCIPAL FORMS AND REFERENCES.

##### A.Forms.

1.Form HUD-92264; Valuation Analysis and Conclusions recorded in Sections B-G, I-J, & O.

2.Form HUD-92273; Unit Type Rental Analyses, supporting rents used in Section C of HUD-92264.

3.Form HUD-92264-TE; Rental Analysis control form for projects receiving tax exempt financing, supporting rents used in

Section C of Form HUD-92264.

4. Form HUD-92274; Project Operating Expense Analysis, supporting expense estimates recorded in Section E of Form HUD-92264.

5. Trial Form HUD-92264-A; completed to preliminarily determine the mortgage amount assumed for certain Section G, Form HUD-92264 "soft costs."

6. Form HUD-4128; completed to assess the project site's environmental suitability.

7. Other Supporting Documentation

a. Replacement Cost Formula; approximates project replacement cost before Section G, Form HUD-92264 is completed.

b. Rent Formula; required for Section 221(d) projects receiving Section 8 rent subsidies to support rents used in Section C, Form HUD-92264.

c. Market Absorption Data Form; supports the Section I, Form HUD-92264 Estimate of Operating Deficit, as well as the basic determination of whether a market exists for the project at the rents shown in Section C, Form

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HUD-92264.

d. Form HUD-9184, Rental Data Cards, records data transferred to Form HUD-92273 analyses.

e. Land Sales Data Cards, records data transferred to Section J of Form HUD-92264 analysis.

B. References.

1. Procedural References

a. HUD Handbooks

(1) Handbook 4465.1, "Valuation Analysis for Project Mortgage Insurance"

(2) Notice H 93-93, "Multifamily Underwriting Reports and Forms Catalog"

(3) Handbook 1390.2, "Environmental Assessment Guide for Housing Projects"

b.Regulations at 24 CFR, Parts 50 and 221

## 2.Substantive References

a.Data collected from private sources

(1)tenants, landlords, lessors, lessees, buyers, sellers, owners and operators of rental properties

(2)management companies

(3)mortgage lending institutions

(4)private real estate appraisers who specialize in multifamily appraisals

(5)other real estate professionals including environmental engineers, brokers, accountants, consultants, lawyers, and others

(6)various professional and trade publications

b.Data collected from public sources

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(1)HUD project inventory

(2)Other HUD professionals including economists, environmental staff, mortgage credit examiners, architectural and cost analysts, loan management specialists, lawyers, and others

(3)State and local property tax assessment professionals and records

(4)Other governmental agencies that possess data about housing environmental impacts, or income property appraisal

## 5-14 PRIMARY PROCESSING RESPONSIBILITIES.

A.Project Income. The assigned appraiser uses the forms and references listed above to estimate the most probable or allowable project income, and records results in Section C, "Estimate of Income," Form HUD-92264.

B.Project Expenses. The appraiser uses the forms and references above to estimate the most probable total project expenses, and

records results in Section E, "Estimate of Annual Expense," Form HUD-92264.

C.Land Value/"As Is" Value. The appraiser uses the forms and references above to estimate the "Warranted Price of Land" for new construction, or the "as is" value for substantial rehabilitation proposals, and records the results in Section G, Form HUD-92264.

D.Environmental Assessment. The appraiser uses the forms and references above to assess whether a project site is approved with a Finding of No Significant Impact (FONSI), approved with a FONSI subject to conditions which may or may not be included in the commitment, or is rejected for reasons cited on the Form HUD-4128.

E.Site and Market Acceptability. The appraiser uses the forms and references above to determine if the site is acceptable, and the project is marketable at the rents reflected in Section C of Form HUD-92264, and records the results in Section J.

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F.Occupancy for Income-Producing Spaces. The appraiser uses the forms and references above to estimate the vacancy and loss factors for the proposal's income-producing space, both residential and commercial, and conversely, occupancy percentages for the same. Residential and ancillary income source occupancy rates cannot exceed 93 percent, and commercial income source occupancy rates cannot exceed 80 percent unless justified by leases signed by financially responsible tenants. The appraiser uses these rates to estimate the project's effective gross income and records the results in Section F of Form HUD-92264. The appraiser completes the mathematic calculations in Section F to estimate net operating income (NOI), and NOI is then transferred to the Trial Form HUD-92264A to estimate the criterion 5 debt service mortgage.

G.Replacement Cost. The appraiser uses the forms and references above to estimate total project replacement cost, and transfers the results to the Trial Form HUD-92264A. After a tentative mortgage amount has been established, the appraiser recalculates "unknown" project soft costs based on the controlling mortgage criterion (i.e., those soft costs that function as percentages of the mortgage), and transfers the results to Section G of Form HUD-92264.

H.Absorption Rate and Operating Deficit. The appraiser uses the forms and references above to estimate the project's probable residential and commercial absorption rate, and thereupon,

estimates operating deficit amounts during initial project rent-up.

I.Narrative Explanations and Remarks. The appraiser briefly summarizes any steps in the analysis of rents, expenses, or land or property valuation that are not self-explanatory, or are not clearly supported by documented facts, or do not clearly support reported conclusions, and supplies such explanations or remarks in relevant sections of Forms HUD-92273, HUD-92274, and Sections J and O of Form HUD-92264.

#### SECTION 4 - THE MORTGAGE CREDIT PROCESS (ANALYSIS)

5-15BASIC SOURCE BOOKS. Except as modified here, basic mortgage credit processing instructions are in HUD Handbook 4470.1, Mortgage Credit Analysis for Project

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Mortgage Insurance, Section 207, and HUD Handbook 4550.3, Investor-Sponsor and Nonprofit Sponsorship of Housing Cooperatives.

#### 5-16 MORTGAGE CREDIT OVERVIEW.

The steps in mortgage credit processing involve: credit investigation; amount and amortization period of loan; determination of estimated requirements for completion of project; determination of mortgagors ability to close the transaction; analysis of acceptability of sponsorship; assurance of completion; insurance of advances; construction changes; and cost certification.

#### 5-17 BUILDER-SELLER MORTGAGOR UNDER SECTION 221(d)(3).

A.Before applying for project mortgage insurance, the mortgagor enters into an agreement (satisfactory to HUD) with a private nonprofit corporation eligible for insurance.

1.The builder-seller mortgagor agrees to sell the project, on completion, to the nonprofit for no more than certified cost of the project.

2.If the sale is not consummated, the project will be operated as a limited distribution rental project.

B.The Mortgage Credit Examiner (MCE) will prepare two Forms HUD-92264-A to determine the Maximum Insurable Mortgage (MIM) for:

1.Limited distribution mortgagor.

2.Nonprofit mortgagor.

C.The difference between the two MIMs developed above must be withheld until the project is sold.

5-18INVESTOR-SPONSOR MORTGAGOR UNDER SECTION 221(d)(3) certifies its intention to sell the project to a management-type cooperative within 2 years after project completion.

A.The MCE prepares two Forms HUD-92264-A to determine the MIM for:

1.Limited distribution mortgagor.

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2.Management-type cooperative.

B.The difference between the MIM amount available to the cooperative and the lesser amount available to the investor-sponsor will be escrowed.

1.At final endorsement, the mortgagee will hold the escrow until the project is converted to a cooperative.

2.If the project is not converted to a cooperative form of operation within 2 years from the date of completion, the escrow will be applied:

a.Against the mortgage or

b.In such other manner as the Commissioner may direct.

5-19COST CERTIFICATION PROCEDURES. Use basic Section 207 instructions except as modified here.

A.Certification purposes in builder-seller and investor-sponsor cases:

1.To establish the maximum insurable mortgage for the project based on the allowed cost of the completed project.

2.To establish the ceiling price at which the project may be sold.

B.Legal, organization and marketing expense in investor-sponsor cases:

1.Two sets of legal and organizational expenses are involved in addition to marketing expense and should be shown separately in Form HUD-92330:

a.Expenses involving the mortgagor (investor-sponsor).

b.Expenses involving the cooperative corporation formed to buy the project.

2.Since the investor-sponsor is legally bound to use its best efforts to sell the project to a cooperative, its marketing expenses should be

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included.

3.If the legal and organizational sum attributable to the cooperative has been exhausted before final endorsement:

a.Investor-sponsor may deposit more money with the mortgagee before final endorsement for application against further organizational expenses of the cooperative (as approved by HUD).

b.The additional deposits may be included in cost certification.

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